

B1 Please add new claims 20-93 as follows:

Sub C1  
Sub D7  
--20. An electronic game apparatus comprising:  
a display for displaying information indicative of action in an electronic game;  
an input device that receives input from a user playing the electronic game;  
an output device having a gyroscopic element; and  
a controller that controls action in the electronic game based at least in part on input received from the user and that manipulates the gyroscopic element to provide a sensation to the user playing the electronic game.

21. The apparatus of claim 20 wherein each of the display, the input device, the output device, and the controller are physically separate components.

22. The apparatus of claim 20 wherein the input device and the output device are integrated as a common component.

23. The apparatus of claim 20 wherein the display is physically separate from at least one of the input device, the output device and the controller.

24. The apparatus of claim 20 wherein two or more of the display, the input device, the output device, and the controller are integrated into a common housing.

25. The apparatus of claim 24 wherein the common housing is configured to be hand-held by the user of the electronic game.

26. The apparatus of claim 24 wherein the common housing has an appearance that resembles an instrument.

27. The apparatus of claim 26 wherein the instrument comprises a weapon.

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28. The apparatus of claim 27 wherein the weapon comprises a knife, a sword, a gun, a hammer, an axe, or a light saber.

Sub 57  
29. The apparatus of claim 26 wherein the instrument comprises an object other than a weapon.

30. The apparatus of claim 20 wherein the electronic game apparatus comprises an electronic sword game.

Sub C27  
31. The apparatus of claim 20 wherein the controller is programmable and wherein the apparatus further comprises software executed by the controller for controlling one or more of (i) the action in the electronic game, (ii) receiving input from the user, and (iii) manipulating the gyroscopic element.

32. The apparatus of claim 20 further comprising a sensor for determining a position or an attitude, or both, of the input device.

Sub C37  
33. The apparatus of claim 32 wherein the controller manipulates the gyroscopic element to provide a sensation to the user playing the electronic game based at least in part on information determined by the sensor.

34. The apparatus of claim 33 wherein the sensor comprises a gyroscopic inertial positioning system.

35. The apparatus of claim 33 wherein the sensor comprises one or more infrared transceivers.

Sub C47  
36. The apparatus of claim 33 further comprising a safety device that prevents manipulation of the gyroscopic element when the user is disengaged.

37. The apparatus of claim 36 wherein the safety device comprises a dead-man's switch.

Sub C57 38. The apparatus of claim 20 further comprising at least one additional gyroscopic element, the controller selectively and independently controlling the gyroscopic elements to provide a sensation to the user playing the electronic game.

Sub D7 39. The apparatus of claim 20 further comprising means for selectively hindering manipulation of the gyroscopic element as the user is applying input to the input device.

40. The apparatus of claim 39 wherein the means comprises a mechanical linkage having a predetermined degree of freedom.

Sub C7 41. The apparatus of claim 20 wherein the controller manipulates the gyroscopic element to provide tactile feedback to the user playing the electronic game.

42. The apparatus of claim 20 wherein the controller manipulates the gyroscopic element to provide torque to the user playing the electronic game.

43. The apparatus of claim 20 wherein the controller manipulates the gyroscopic element to provide sensations to the user that correspond to action in the electronic game.

44. The apparatus of claim 20 wherein the controller manipulates the gyroscopic element to provide feedback to the user that motivates the user to conserve rotational energy of the gyroscopic element.

45. The apparatus of claim 20 wherein the controller manipulates the gyroscopic element to provide feedback to the user that urges the user to move the input device in a predetermined direction.

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46. The apparatus of claim 20 wherein the controller manipulates the gyroscopic element to provide feedback to the user that urges the user to move the input device in a direction toward a target area.

47. The apparatus of claim 20 wherein the controller manipulates the gyroscopic element to provide a sensation to the user that resists a movement by the user of the input device.

48. The apparatus of claim 20 wherein the controller manipulates the gyroscopic element to provide feedback to the user that urges the user to remain within a predetermined field of play.

49. A network-based electronic game system comprising:

(a) a plurality of electronic game components, each comprising:

(i) an input device that receives input from a user playing the electronic game;

(ii) an output device having a gyroscopic element; and

(iii) a controller for controlling action in the electronic game based at least in part on input received from the user and for manipulating the gyroscopic element to provide a sensation to the user playing the electronic game; and

(b) a network for enabling communication among the plurality of electronic game components.

50. An electronic game apparatus comprising:

a display for displaying information indicative of action in an electronic game;

a gyroscopic element; and

a controller that manipulates the gyroscopic element in accordance with action in the electronic game.

51. The apparatus of claim 50 wherein the controller is programmed to manipulate the gyroscopic element to provide a sensation to the user playing the electronic game.

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Sub 17 52. The apparatus of claim 50 wherein the controller is programmed to manipulate the gyroscopic element to generate a physical effect in one or more components of the electronic game apparatus.

53. The apparatus of claim 50 wherein the gyroscopic element is embodied in an output device.

54. The apparatus of claim 53 wherein the controller manipulates the gyroscopic element to provide a sensation to a user playing the electronic game.

55. The apparatus of claim 50 further comprising an input device that receives input from a user playing the electronic game, and wherein the controller further controls action in the electronic game based at least in part on input received from the user.

Sub C 17 56. The apparatus of claim 50 wherein the display is physically separate from at least one of the gyroscopic element and the controller.

57. The apparatus of claim 20 wherein two or more of the display, the gyroscopic element, and the controller are integrated into a common housing.

58. The apparatus of claim 57 wherein the common housing is configured to be hand-held by the user of the electronic game.

Sub C 17 59. The apparatus of claim 50 wherein the controller is programmable and wherein the apparatus further comprises software executed by the controller for controlling one or more of (i) action in the electronic game, (ii) receiving input from a user, and (iii) manipulating the gyroscopic element.

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60. The apparatus of claim 50 further comprising at least one additional gyroscopic element, the controller selectively and independently controlling the gyroscopic elements in accordance with action in the electronic game.

61. The apparatus of claim 50 wherein the controller manipulates the gyroscopic element to provide tactile feedback to a user playing the electronic game.

62. The apparatus of claim 50 wherein the controller manipulates the gyroscopic element to provide torque to a user playing the electronic game.

63. The apparatus of claim 50 wherein the controller manipulates the gyroscopic element to provide feedback to a user that motivates the user to conserve rotational energy of the gyroscopic element.

64. The apparatus of claim 50 further comprising an input device and wherein the controller manipulates the gyroscopic element to provide feedback that urges the user to move the input device in a predetermined direction.

65. The apparatus of claim 50 further comprising an input device and wherein the controller manipulates the gyroscopic element to provide feedback that urges a user to move the input device in a direction toward a target area.

66. The apparatus of claim 50 further comprising an input device and wherein the controller manipulates the gyroscopic element to generate a physical effect that resists movement of the input device.

67. The apparatus of claim 50 wherein the controller manipulates the gyroscopic element to provide feedback that urges a user to remain within a predetermined field of play.

*B1 out*  
*Sub B17*  
68. The apparatus of claim 50 wherein the electronic game apparatus is configured to be hand-held by a user of the electronic game.

69. The apparatus of claim 50 wherein the electronic game apparatus comprises an electronic sword game.

70. A method of controlling an electronic game, the method comprising manipulating a gyroscopic element to provide a sensation to a player based on action in the electronic game.

*Sub C97*  
71. The method of claim 70 wherein manipulating the gyroscopic element to provide a sensation to the player comprises providing tactile feedback to the player based on action in the electronic game.

72. The method of claim 70 wherein manipulating the gyroscopic element to provide a sensation to the player comprises urging the player to move a game apparatus component in a predetermined direction.

73. The method of claim 72 wherein urging the player comprises providing the user with a sensation that encourages the user to move the game apparatus component in a direction toward a target area.

*Sub C107*  
74. The method of claim 70 wherein manipulating the gyroscopic element to provide a sensation to the player comprises resisting a movement by the player of a game apparatus component.

75. The method of claim 70 wherein manipulating the gyroscopic element to provide a sensation to the player comprises providing an incentive to the player to remain within a predetermined field of play.

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Sub 17 76. The method of claim 70 wherein manipulating the gyroscopic element to provide a sensation to the player comprises providing an incentive to the player to conserve a rotational speed of the gyroscopic element

77. The method of claim 70 further comprising receiving input from the player.

Sub C17 78. The method of claim 77 wherein manipulating the gyroscopic element to provide a sensation to the player is based at least in part on input received from the user.

79. The method of claim 77 further comprising controlling the action of the electronic game based at least in part on the received input, the sensation provided to the player, or both.

80. A method of controlling an electronic game, the method comprising manipulating a gyroscopic element to cause a physical effect based on action in the electronic game.

Sub C12 81. The method of claim 80 wherein manipulating the gyroscopic element to cause a physical effect based on action in the electronic game comprises imparting a force on one or more electronic game components.

82. The method of claim 80 wherein the physical effect is intended to be sensed by a human player of the electronic game.

83. Software, embodied in a form understandable by a programmable controller, for causing the programmable controller to control an electronic game having a gyroscopic element, the software comprising instructions to manipulate the gyroscopic element to cause a physical effect based on action in the electronic game.

Sub C13 84. The software of claim 83 wherein the instructions to manipulate a gyroscopic element to cause a physical effect based on action in the electronic game comprise instructions



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*Sub 17* for manipulating the gyroscopic element to provide a sensation to a user playing the electronic game.

85. The software of claim 84 wherein the instructions for manipulating the gyroscopic element to provide a sensation to the player comprise instructions that result in providing tactile feedback to the player based on action in the electronic game.

86. The software of claim 84 wherein the instructions for manipulating the gyroscopic element to provide a sensation to the player comprise instructions that result in urging the player to move a game apparatus component in a predetermined direction.

87. The software of claim 86 wherein the instructions that result in urging the player comprise instructions that result in providing the user with a sensation that encourages the user to move the game apparatus component in a direction toward a target area.

*Sub C14* 88. The software of claim 84 wherein the instructions for manipulating the gyroscopic element to provide a sensation to the player comprise instructions that result in resisting movement of a game apparatus component.

89. The software of claim 84 wherein the instructions for manipulating the gyroscopic element to provide a sensation to the player comprise instructions that result in providing an incentive to the player to remain within a predetermined field of play.

90. The software of claim 84 wherein the instructions for manipulating the gyroscopic element to provide a sensation to the player comprise instructions that result in providing an incentive to the player to conserve a rotational speed of the gyroscopic element.

91. The software of claim 84 further comprising instructions for receiving input from the player.